

208-4160 Volt

NG650-01 60 Hz / 1800 RPM

650 kWe Standby

## Ratings

	208 <b>V</b>	240V	480 <b>V</b>	600 <b>V</b>	4160V
Phase	3	3	3	3	3
PF	0.8	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	573RSL6433	573RSL6433	573RSL6433	573RSS4274	574FSM4358
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE	6 LEAD WYE
kWe Nat (LP)	650 (400)	650 (400)	650 (400)	650 (400)	650 (400)
AMPS Nat (LP)	2258 (1390)	1957 (1204)	978 (602)	783 (482)	113 (69)
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C

## Standard Equipment

#### **Engine**

- ► Radiator Cooled Unit Mounted (50°C)
- ▶ Blower Fan & Fan Drive
- ▶ Starter & Alternator
- ▶ Oil Pump & Filter
- ▶ Oil Drain Extension w/Valve
- ▶ Governor Electronic Isochronous
- ▶ 24V Battery System & Cables
- ► Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ▶ EPA Certified
- ▶ MasterTrak Remote Monitoring System

### **Listing Certifications**

- ▶ UL 2200 Listed\*
- ▶ cUL Listed\*
- ► CSA Certified\*
- ▶ Seismic Certified to IBC 2018
- ▶ NFPA 110 Compliant

\*Through 600VAC

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± .25% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°C Standby Temperature Rise
- ▶ 100% of Rated Load One Step
- ▶ 5% Maximum Harmonic Content
- ► NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise

#### Additional

- ▶ Single Source Supplier
- ▶ Microprocessor Based Digital Control
- ▶ Interface Connection Box
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired\*
- ► Catalyst / Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ► Jacket Water Heater (Qty 2) -20°F 6000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts (Pad Type)
- ► Radiator Duct Flange (OPU Only)
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Gray

NG650-01 1 of 4

### 650 kWe



# Application Data

Engine			
Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	1941 (31.8)
Model:	31.8LT	Bore - in. (cm) x Stroke - in. (cm):	5.91 (15.0) x 5.91 (15.0)
Type:	4-Cycle	Compression Ratio:	10.5 : 1
Aspiration:	Turbocharged, CAC	Rated RPM:	1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kWm):	966 (716)

Exhaust System		Standby
Gas Temp. (Stack): °F (°C)		1,183 (639)
Gas Volume at Stack Temp: CFM (m³/min)		4,079 (115)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)		40.8 (10.2)
Cooling System		,
Ambient Capacity of Radiator: °F (°C)		122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H <sub>2</sub> O (kPa)		0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)		361 (1,368)
Heat Rejection to Coolant: BTUM (kW)		34,074 (596)
Heat Rejection to CAC: BTUM (kW)		4,169 (73.0)
Heat Radiated to Ambient: BTUM (kW)		4,440 (77.7)
Air Requirements		
Aspirating: CFM (m³/min)		1,320 (37.4)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)		65,100 (1,842)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Re	mote Cooled Applications
Fuel Consumption	Natural Gas	LP
At 100% of Power Rating: ft3/hr (m3/hr)	6,915 (196)	1,808 (51.2)
At 75% of Power Rating: ft3/hr (m3/hr)	5,303 (150)	1,540 (43.6)
At 50% of Power Rating: ft3/hr (m3/hr)	4,127 (117)	1,372 (38.8)
Fuel Inlet Size: NPT		3.00"
Fuel Pressure Required: in. H20 (kPa)		11.0 (2.70)
Fluids Capacity		
Total Oil System: gal (lit)		32.2 (122)
Engine Jacket Water Capacity: gal (lit)		23.3 (88.2)
System Coolant Capacity: gal (lit)		115 (435)

All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1.5% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 2.5% Per 1,000 ft Over 1,200 ft

NG650-01 2 of 4

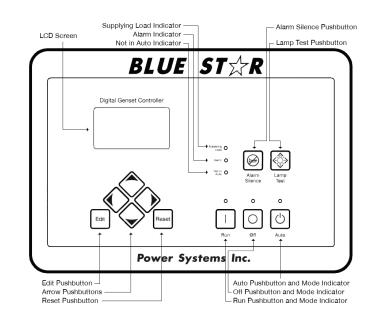
#### 650 kWe



## DGC-2020 Control Panel

#### **Standard Features**

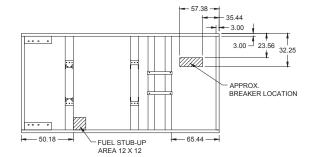
- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ► CAN Bus (J1939) ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ 15 Contact Outputs
- ▶ RS485 Communicator Interface
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible

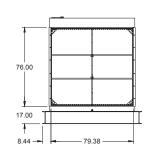


## Weights / Dimensions / Sound Data

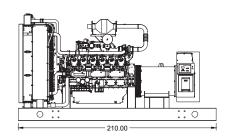
	LxWxH	Weight lbs
OPU	210 x 96 x 103 in	15,000
Level 1	210 x 96 x 108 in	16,900
Level 2	210 x 96 x 108 in	17,000
Level 3	285 x 96 x 108 in	18,000

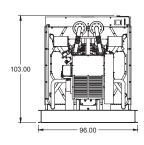
Please allow 6-12 inches for height of exhaust stack.





	No Load	Full Load
OPU	86 dBA	89 dBA
Level 1	84 dBA	87 dBA
Level 2	79 dBA	82 dBA
Level 3	74 dBA	77 dBA





Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

NG650-01 3 of 4

### 650 kWe



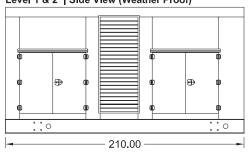
Level 1, 2 & 3 | Intake View

96.00

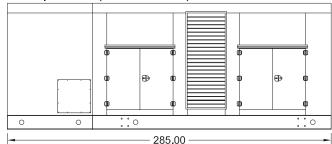
108.00

## **Enclosures**

Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



All enclosure models are 200 MPH wind rating certified in accordance with IBC2018 and ASCE/SEI 7-16 standards.

Level 2 & 3 enclosures include sound attenuation foam.

Level 3 enclosure includes frontal sound & exhaust hood.

\*Enclosure height does not include exhaust stack.

All specification sheet dimensions are represented in inches. Materials and specifications subject to change without notice.



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